

# LEAD

## Prophet sharing

Peter Drucker pontificates about the world  
**BEYOND** the information revolution.

BY MARK WILLIAMS

**P**ETER DRUCKER is 90. For six decades, he has advised the heads of corporations and governments. He is modest about it all, remembering legendary figures like IBM's founder Thomas J. Watson Sr. as friends. Once, after he told us something remarkable, we asked whether some historian we might read could tell us more. "No," he responded in his measured, gravelly, Viennese-accented tones, "I am the single survivor of that commission of Mr. Eisenhower's." What he had told us was that a project to establish universal health care had been suggested in the '50s, but the United Auto Workers union had blocked it. When contacted, UAW officials grouched that Mr. Drucker was an "exalted curmudgeon," yet didn't deny his claim outright.

Mr. Drucker lives in a middle-class home in Claremont, a Los Angeles suburb, donating much of the money from his books, lectures, and consulting to charity. Wearing a blue blazer, sharply pressed trousers, and a red tie, he ushered us in when we rang. Nowadays he leans on a cane to get around. Still, he maintains a vigorous pace: writing, teaching five days a week at Claremont Graduate University, and preparing online management courses for Corpedia Training Technologies.

Privatization, outsourcing, management theory, knowledge workers, and the knowledge economy are concepts Mr. Drucker originated. They've changed both the past and the present. But while ranging over a variety of topics—from Bill Gates's disgruntled

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**'Nothing is more dangerous than profit-sharing, stock options, and such that don't meet expectations.'**

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ex-employees to Franz Kafka inventing the safety helmet—we knew that Mr. Drucker had been thinking hard about the future: the world beyond the information revolution. We steered him toward that. His answers, we believe, will startle you.

*You've said that giving knowledge workers stock options amounts to nothing more than bribing them with a currency that*

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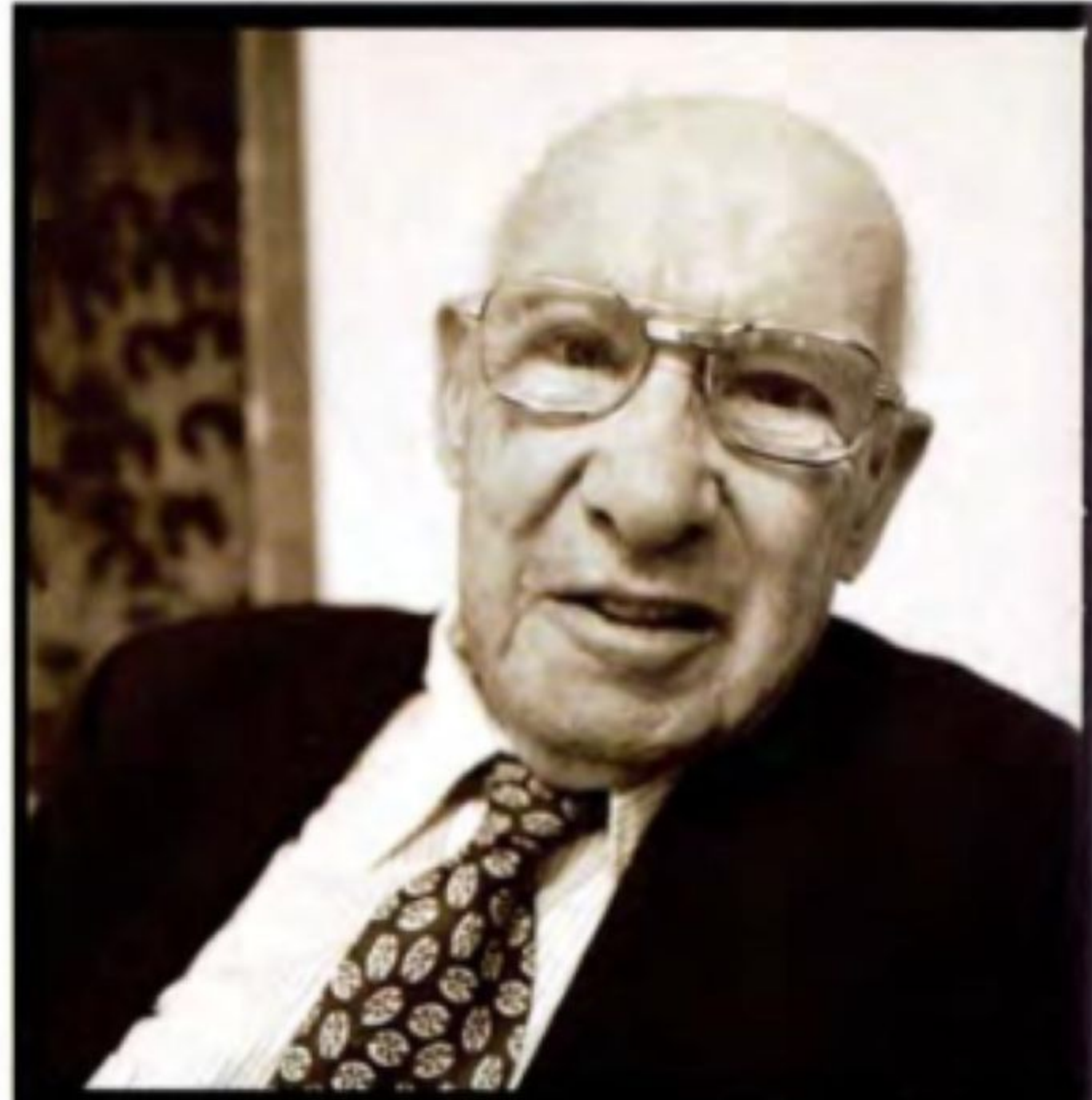
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*will have diminished value after the stock market boom subsides. It won't work, you've claimed.*

I told some of my friends and clients five years ago that we've plenty of experience with this, especially if you've been around as long as I have. Financial incentives don't prevent people from leaving. They motivate people to leave, because the moment they can get that bonus or exercise those options, then the immediate financial gain becomes their only motivation.

Companies that have gone in most for these things have had the greatest turnover. IBM once had the largest alumni association in the world. No longer. It's incredible the number of ex-Microsoft people I've encountered. Furthermore, those two alumni associations which were the largest—Procter & Gamble and IBM—those alumni love their ex-companies. Microsoft alumni hate Microsoft. Precisely because they feel the one thing it offered them was money and not...well, they resent that all the publicity goes to the top people, to one top man, and they don't get recognition. Also, they feel the value system is entirely financial, and they see themselves as professionals. Maybe not scientists, but applied scientists. So their value system is different.

Recently, I spoke with a high-tech company I've seen grow over 50 years from babyhood into a big company—we're talking about \$10 billion in sales. I was there for one day, but for two weeks this meeting of senior management was focused on holding knowledge people. Their turnover rate—they're not in Silicon Valley—had become frightening. Before this meeting, they did something I'd suggested. They went to senior researchers and technical staff who'd left



and asked why. The answer they received was, 'Whenever I came to talk to one of you, all you talked about was the stock price.' One fellow said, 'I spent six weeks in China with our three main customers there, and when I returned and went to the head of international technical service, I sat for an hour trying to talk about the opportunities I see in China. All that interested him was that our stock went down eight points the day before.'

That isn't fun. Management increasingly will have to balance this against the concern with immediate financial results, which won't subside while the stock market does well. If I sound like an old financial man now, I am, you know. But we believed that when you see that the trading volume isn't people who buy shares or who sell shares, but traders buying and selling short term, then the market has become out of control.

*I understand you were an investment banker in London.*

I left the financial business 63 years ago and haven't been interested in it since. Still, anybody who knows anything knew six months ago that Intel would have a bad period. It's a period of change in which one must invest in

things that, firstly, have high risk and, secondly, require some years. Anybody who understands anything understood that. Yet when they published it, Intel's stock just disappeared. That's an unstable market.

*So companies can no longer drive knowledge workers with stock options?*

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**'In health care, information technology has already made a fabulous impact.'**

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You've heard the human resources adage that you cannot hire a hand, the whole man always comes with it? Well, you cannot just hire a man, the spouse always comes with it. And the spouse has already spent that stock option money. I'm not joking. Nothing is more dangerous than profit-sharing, stock options, and such that don't meet expectations.

*Haven't you said that important knowledge workers will have to be made full partners, rather than mere shareholders?*

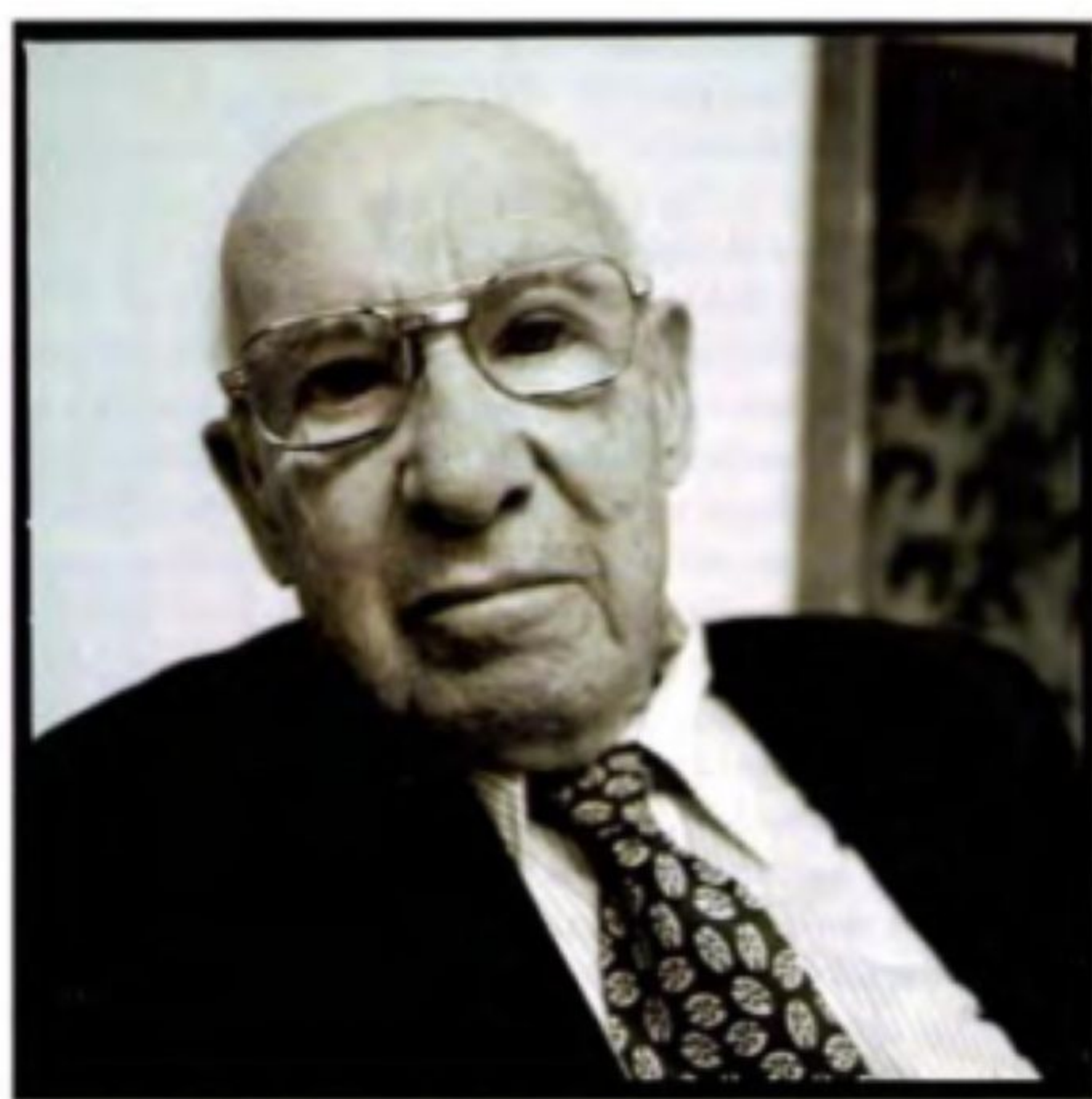
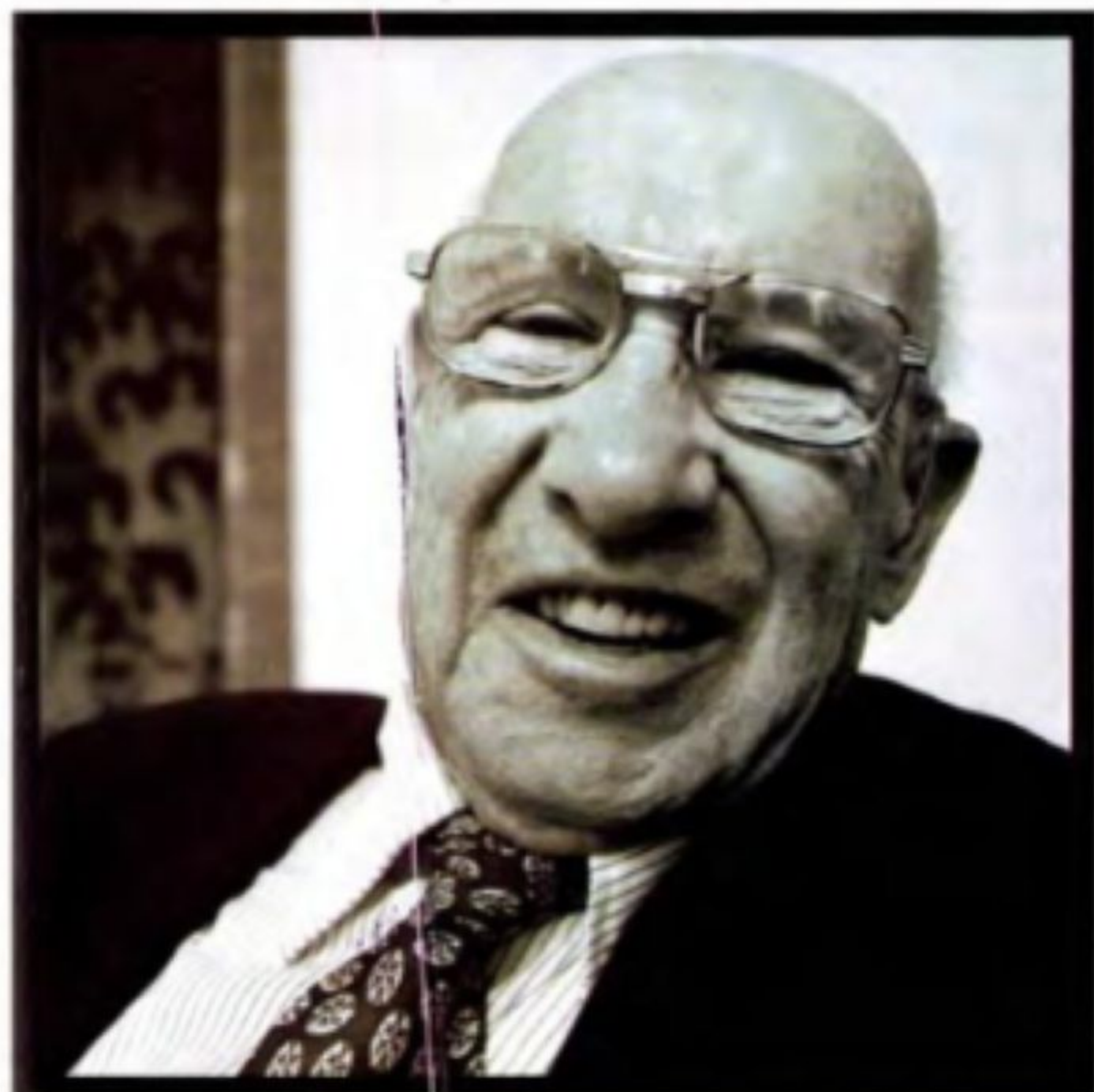
Yes. I am talking of things that I'm

working on. These aren't matters I'm positive about yet. In many cases, it will make more sense to work with highly specialized senior people as independent contractors.

*We need to measure knowledge workers' productivity. How do we do that?*

We begin by asking even lower-level knowledge workers three things: What are your strengths and what should you put work into? What should this company expect from you and in what time span? And what information do you need to do your work and what information do you owe?

I learned this many years ago when I worked with one of the world's biggest pharmaceutical companies. A new CEO expected each department head to explain what their function should contribute. The head of research said, 'You can't measure research.' So we arranged meetings with 11 to 13 people at a time, working through the research department. I asked, 'Looking over the last five years, what have you contributed which made a difference? What do you think you can contribute in the next three years?' Suppose they'd found some hormonal function that changed our understanding of how the pancreas works. It might be 20 years, if ever, before that



became a product. However, repeatedly—this was the early 1960s—there'd been important contributions that evaporated. They didn't fit the market for pharmaceutical companies or how the medical director saw the company. So we had to change that. We brought the medical, marketing, and manufacturing people into what was happening in research. They doubled the utilization—the yield from research—within five or six years.

*What about American health care, which seems mired in contradictions?*

It's no worse than any other country's. They're all bankrupt. It'll be a growth sector simply because health care and education together will be 40 percent of the gross national product within 20 years. Already, they're at least a third.

Furthermore, as more and more services by government agencies will be outsourced, it will make little difference whether the organization which gets a contract to clean the streets is for profit or not for profit. It won't be in the market economy. If I could voice one comment on your magazine and the present e-commerce and e-business-to-business concern altogether, it's so far focused on business. Yet I think the greatest

e-commerce impact may be in higher education and health care. It makes possible a rational restructuring of health care. Eighty percent of demands in health care require only a nurse-practitioner. What she needs to know is when to refer a patient to a physician, which largely now can become a matter

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**'The idea American health care is in particularly bad shape is nonsense. They're all in total disarray.'**

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of using information technology.

I've worked with hospitals which are the only ones within 300 miles. It's incredible what a difference information technology has made to them. Take Grand Junction, Colorado, with 26,000 inhabitants. The only sizable city within 200 miles is Salt Lake City. Now Grand Junction's hospital can make a diagnosis of a patient which brings in the University of Colorado medical school in Denver and whatever medical school Salt Lake City has. That answers that small

hospital's basic problem, which was that they couldn't build their own specialist center.

*Was this that hospital's only problem? Could it even be profitable, given that area's population base?*

You may have a million people for whom Grand Junction represents the nearest decent hospital. I've worked with a consortium of 25 such hospitals, from West Virginia to Oregon. Information technology can make them the equivalent of a big-city university hospital. With that patient with convulsions and vertigo that nobody in Grand Junction can diagnose, for example, now the doctor says, this may be a thyroid problem and we'll talk to Salt Lake City. The specialist in Salt Lake City diagnoses a cyst on the thyroid pressing the carotid—this was an actual case—and says, 'I've done some of those, but my colleague in Denver is better. Helicopter him there.' Three days later, the patient is back in Grand Junction.

Thus, in health care, information technology has already made a fabulous impact. In education, its impact will be greater. However, attempts to put ordinary college courses on the Internet are a mistake. Marshall McLuhan was correct. The medium not only controls how

# Peter Drucker

things are communicated, but what things are communicated. On the Web, you must do it differently.

*How so?*

You must redesign everything. Firstly, you must hold students' attention. Any good teacher has a radar system to get the class's reaction, but you don't have that online. Secondly, you must enable students to do what they cannot in a college course, which is go back and forth. So online you must combine a book's qualities with a course's continuity and flow. Above all, you must put it in a context. In a college course, the college provides the context. In that online course you turn on at home, the course must provide the background, the context, the references.

*What about online education's potential in the developing world? For example, the Indian government has begun a program to put an online PC in each village for education.*

My prejudices show. In the early 1950s, President Truman sent me to Brazil to persuade the government there that with the new technology, we

Mandarin. You have the country unified not only by script, but by language. It's still only 70 percent. But it was 30 when Mao came in.

We can make the new technology available to the remotest village in the Amazon. The obstacles are, first, enormous resistance by teachers, who see themselves threatened. Secondly, it isn't true that you've support for education in every third world country. I worked hard in Colombia and helped found the Universidad del Valle in Cali. We had a very difficult time in those small coffee-growing towns because parents expected children to be at work in the fields at age 11.

In India that's a great problem. Moreover, schools are an equalizing force. That's a tremendous obstacle in Indian provinces like Orissa, say, where the upper castes would bitterly fight admission of lower-class children.

*Let's return to health care. Some people insist that market forces can be a cure-all for U.S. health care. Given situations like these rural hospitals where little opportunity for profit exists, is that true?*

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**'I, with my clients, go on a simple assumption: you cannot survive as a manufacturing company. You must become a knowledge company based on distribution.'**

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could wipe out illiteracy in five years at no cost. The Brazilian teachers' union sabotaged it. We have possessed the technology to eliminate illiteracy for a long time.

Let me point out that the one great achievement of Mao's government was to eliminate illiteracy in China. Not by means of a new technology, but a very old one: the student who has learned to read teaches the next one. Teachers have obstructed this everywhere because it threatens their monopoly. Yet older students teaching younger students is the quickest way. It's what the Chinese have done. For the first time the great majority of Chinese understand and can speak

No. Market forces cannot be the cure-all for health care. I always put my cards on the table. I have been the consultant to two major national health care systems. One for 50 years, one for 30. The idea that American health care is in particularly bad shape is nonsense. They're all in total disarray. The reason is that they're based on the facts of 1900. The worst is either the German or the Japanese. As I said, 80 percent of demands on a health care system are routine problems a nurse-practitioner can handle. You face two issues with a nurse-practitioner. First, you must ensure she doesn't go beyond her competence, so you emphasize she should over-refer to the medical cen-

ter, not under-refer. The second problem is that a nurse-practitioner doesn't have the authority to change anybody's lifestyle. For 3,000 years we've built the mystique of the MD. When the doctor says you must lose 15 pounds, and the nurse-practitioner says it, you hear something different.

Then there's the 20 percent of health care which requires modern medicine. Incidentally, I'm going to shock you. Medical advances since antibiotics have had no impact on life expectancy. They are wonderful for tiny groups, but statistically insignificant. The great changes have been in the work force. When I was born, 95 percent of all people worked in manual jobs—most of them dangerous, debilitating jobs. You've heard of Franz Kafka, haven't you?

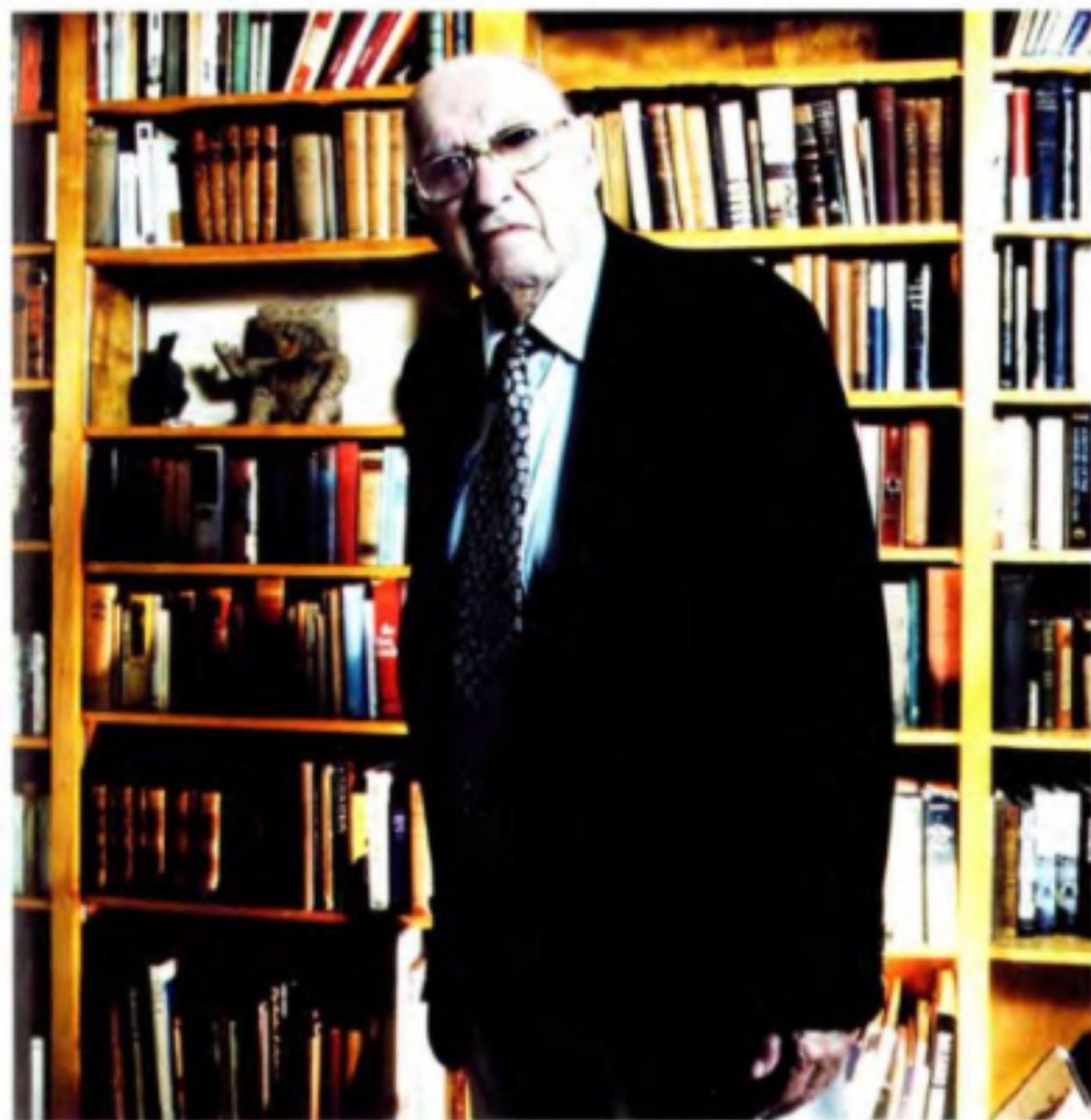
*Of course.*

You think he was a great writer, don't you? But Franz Kafka invented the safety helmet. He was the great man in factory inspection and workman's compensation. Kafka was the workman's compensation-factory safety man for what's now the Czech Republic, which was Bohemia and Moravia before World War I. Our next-door neighbor was the top workman's compensation-factory safety man for Austria. Kafka was his idol. When Kafka [was dying] outside of Vienna of throat tuberculosis, Dr. Kuiper—our neighbor—pedaled on his bike at 5 each morning for two hours to visit the dying Kafka, then took the train to work. After Kafka's death, nobody was more surprised than Dr. Kuiper to discover he'd been a writer. Kafka got the gold medal of, I think, the American Safety Congress for 1912 because as a result of his safety helmet, the steel mills in what is [now] the Czech Republic for the first time killed fewer than 25 workers per 1,000 a year.

*Did you know that Blue Cross and Blue Shield of Massachusetts employs as many people to administer coverage for 2.5 million New Englanders as are employed in Canada to administer coverage for 27 million Canadians?*

Yes. And it isn't true. You are comparing...

*Apples and oranges?*



CALLING AHEAD: Mr. Drucker says the free market in goods is on the way out.

No. Apples and beavers. The Canadian system doesn't administer health care. It pays fixed rates, that's all. What we do now, the Canadian system doesn't. It doesn't tell any doctor what to do. It just says, for this you get X dollars in Ontario and Y dollars in Saskatchewan. Blue Cross—in Massachusetts particularly—is trying to be an HMO: a health care provider, not a health care payer. The Canadian system is not managed care, it's managed costs.

*What should happen with American health care?*

Let me say that if we had listened to Mr. Eisenhower, who wanted catastrophic health care for everybody, we would have no health care problems. What shut him down, as you may not have heard, was the UAW. In the 1950s, the only benefit the unions could still promise was company-paid health care. Under the Eisenhower principle, where for everybody who spent more than 10 percent of their taxable income for

health expenditures, government would pay, this would have been eliminated. So the UAW killed it with help from the American Medical Association. Still, the AMA wasn't that powerful. The UAW was.

*You've talked about demographic changes, with more old people in the developed nations and more younger people, for the next 40 years, in the developing nations. Do you worry how it will be for the young in a world dominated by the old?*

Look. In the developed countries, with the exception of the U.S., the number of young people is already going down sharply. In the U.S., it will begin diminishing in 15 or 18 years. Since 1700, we've tacitly assumed that population grows, and the foundation grows faster than the top. So this is unprecedented. We have no idea what it means.

There are indications. We know that in the Chinese coastal cities, the middle class spends more on the one child they are allowed than they used to spend on all

four that they had before. Those kids are horribly spoiled. That's true in this country, too. When I look at what ten-year-olds expect to own, it's unthinkable for my generation.

Also, when you say young people, in the developed countries that will mean, very heavily, immigrants, not children. They're immigrants, whether a Mexican entering Southern California, a Nigerian entering Spain, or a Ukrainian entering Germany. These will be young, in that the average age of an immigrant into the developed countries is between 18 and 28. They represent a very heavy capital in their upbringing, yet aren't adequately educated. We don't know what that means. Perhaps tremendous additional productive power and tremendous demand for additional educational expenses. We don't know, we've never been there.

But it is predictable that today's youth culture will not last forever. It's an old insight that the prevailing culture is made by the fastest-growing population group. That will not be young people.

*Today we can buy for \$10 a wristwatch more reliable and durable than the clockwork items companies once doled out to retiring employees. In the automobile industry, which increasingly refines its designs so cars become safer and more dependable, the same trend is visible. As this trend dominates more and more industries, how will corporations compete?*

I, with my clients, go on a simple assumption: you cannot survive as a manufacturing company. You must become a knowledge company based on distribution. You cannot really differentiate products in manufacturing.

The automobile industry is interesting. A car's relative price against the price of 30 years ago is 40 percent less. Conversely, many automobile customers have shifted to the sports utility vehicle. Probably, adjusted for inflation and the relative purchasing power of knowledge, what those people pay isn't much less than they paid 30 years ago. Manufactured goods'

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prices, adjusted for inflation, are down 40 percent since the Kennedy years, and the cost of the two main knowledge products, education and health care, is three times inflation. In fact, the relative purchasing power of manufactured goods is maybe one-quarter of what it was 40 years ago. Yet the automobile industry—and it's the only one—has been compensated by people buying these more expensive vehicles. Still, though a large proportion of the population buys these vehicles, they drive [them] so much longer. Those vehicles are only short-term profit centers.

Long-term? Forty percent of the automobile-buying public in America once bought a new car every two years. Now, in the parking lot for our college's advanced executive program, I don't think there's a single car younger than five years. So, an automobile company can survive as a manufacturing company, though there's no product differentiation. Yes, one point of market share is worth god knows how much. However, you take it from someone else. As far as the industry is concerned, nobody makes more money.

Therefore, you must become a distribution company based on knowledge about the database. This is the great shift. It's comparable to what happened since World War I in agriculture. The output in volume of products is rising very fast. In terms of percentage of national product, it's diminishing very fast. In terms of employment, it's shrinking very fast. Manufacturing does not add value any more. Value is contributed in knowledge and distributing.

*Coming to America during the Great Depression, when intellectuals had mostly signed on with collective ideologies, you were independent enough to realize that corporations could be 'the place in which and through which the social tasks would be organized.' But today we see events—like the demonstrations in Seattle—showing that the Marxist critique of Victorian-era capitalism still overshadows how many people see corporations. What might change that?*

Let me say that there are very serious reasons why those assorted demonstrators are a motley crowd, have nothing in common, and will not make much

impact. We are not going into globalization. The decline in manufacturing will force...Look, for every shrinkage of 1 percent in agriculture and employment, farm subsidies in all developed countries have risen 2 percent since World War II. Expect the same in manufacturing. We aren't going into a free market in goods and services. Free market means free market in information. In goods and services—goods, especially—there will be increasing protectionism. The fewer jobs, the more protection. We've been through that in farming. You will see it in manufacturing.

That new Mexican president, Mr. Fox, is right that the more rapidly we

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**'The number of jobs being exported is minimal. It's the jobs at home that are being changed totally.'**

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integrate Mexico into the North American economy, the better. You can't possibly expect development on yesterday's basis of export-led development. While the Mexican birthrate is dropping faster than anywhere else in the world—from four or five children for each woman of reproductive age, it's down to below two, and it'll probably be below one in ten years—an enormous number of people are reaching age 20 from the high-birthrate years of 20 years ago, when infant mortality dropped sharply. The only choice is, will these people be low-paid workers in Southern California or even lower-paid ones in Mexico? I don't think we have a choice.

Mr. Fox is absolutely right, because he sees the North American region as a protected, highly subsidized area, like the European Economic Community is in agriculture and is becoming in manufacturing. Incidentally, the ones most threatened by this development are the Japanese, because there is no East Asian economic area—and if one emerges,

China will dominate it.

So, the protesters against globalization not only have a point—sure, they protest against the wrong things—but they feel the pain. U.S. policy of the last 30 years, pushing for free trade anyplace, assumes the U.S. has the advantage in most areas. Which we had because of our knowledge base. I don't think you can take that for granted. I wouldn't say we're endangered, but there's every reason to believe that other areas will catch up.

I think you will see regional protectionism. You will also see growing environmental pressure against globalization. Have you ever been to Indonesia? All the controls are on the statute books, but the pollution is unbelievable. Bali is being destroyed by pollution. Export of pollution will bring growing pressure to control it.

And immigration is becoming the central political issue everywhere. From that point of view, these protesters are not post-Marxists—though there are ex-Marxists among them.

*These aren't just children of affluence looking for a focus?*

So far, these protests have no focus. They are protests against the system, whatever that means.

We have shifted very heavily from being labor-intensive to capital-intensive. So far that has compensated for the loss of relative purchasing power of manufacturing goods. How much longer will that continue? I don't know.

But all the world over, the blue-collar manufacturing worker is losing something more important than income. He's losing status. So he's protesting against globalization, which he thinks means the exporting of jobs. Hell, no! The number of jobs being exported is minimal. It's so small it ain't funny! It's the jobs at home that are being changed totally.

We will see more of these protests. They are hitting out against yesterday's targets, but they are hitting out because of today's pain. ☹

*Mark Williams is a contributing editor. Write to markred@pacbell.net.*

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